

### **SUBSTITUTE ABSTRACT**

Provided are methods, test devices, and diagnostic kits for predicting, assessing, and diagnosing the risk of a disease using salivary analysis. The methods comprise providing a whole (unfractionated) saliva sample from a subject; contacting an aliquot of the saliva with two or more lectins under conditions that allow the two or more lectins to bind to a lectin-binding component of the saliva; detecting the amount of bound lectin; and comparing the amount of bound lectin to the amount known to bind a saliva sample from a control patient, to predict the risk of a disease in the subject. Also provided are methods for reducing the risk of a disease and a method for assessing the risk of the disease at a defined level.